

(Basic): JP 60063465 A

Material comprises a compsn. contg. salicylaldehyde-ethylene diimine metal complex, and is applied to a base material by printing, coating or impregnation.

The metal complex is, e.g., of cobalt, n com iron, copper, etc. The complex may be supported by a carrier such as titanium oxide, e calcium carbonate, clay, kaolin, etc. Base material is, e.g., paper, non-woven cloth, plastic sheet, etc. Binder resin for the compsn. is, e.g., cellulose acetate propionate, ethyl cellulose, butyral resin, etc.

USE - For detecting the presence of oxygen in a package by colour change with change in oxygen partial pressure in the package.

In an example, a compsn. consisting of salicylaldehyde-ethylene diimine cobalt complex 6 pts., ethyl cellulose 58 pts., dispersing agent 0.5 pt., wax 1 pt., ethyl acetate 25 pts. and toluene 5 pts. is applied to the surface of base material consisting of polyvinylidene chloride-coated biaxially stretched nylon-6 to form an ink film of 40 microns, and p polyethylene film of 40 microns is then laminated onto the film. A bag of 400 cc is formed from the material and a deoxygenating agent is sealed in the bag. The oxygen detecting material is initially a blackish brown colour and turns brown after 1-2 days at 30 deg.C, when the concn. of oxygen in the bag is less than 0.1%.

Derwent Class: A97; E12; E36; J04

International Patent Class (Additional): G01N-031/22

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Oxygen detecting agent e.g. for food packaging - comprises cobalt complex

of Schiff base derived from salicylaldehyde (deriv.) and diamine

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Patent Family:

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JP 60035260 A 5

Abstract (Basic): JP 60035260 A

Agent consists mainly of a cobalt complex of Schiff base consisting of salicylaldehyde or its deriv. and diamines.

Salicylaldehyde deriv. is e.g. 3-fluorosalicylaldehyde, etc.

Diamine is e.g. ethylenediamine, gamma, gamma'-diaminopropylamine, etc.

USE/ADVANTAGE - For e.g. detecting incompleteness in removal of oxygen or in the air-tightness of packages, etc. for packages of fresh foods, processed foods, organic drugs, metallic goods, etc. The